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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Mathus et al. GROUP: 1743  
SERIAL NO: 09/457,796 EXAMINER: Bex, Patricia K.  
FILED: December 12, 1999  
FOR: TUBE RACK

Honorable Commissioner of  
Patents and Trademarks  
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P.O. Box 1450  
Alexandria, VA 22313-1450

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TRANSMITTAL OF APPEAL BRIEF

Transmitted herewith, in triplicate, is the APPEAL BRIEF in this application, with respect to the Notice of Appeal filed on June 11, 2003.

This application is on behalf of other than a small entity. Enclosed is a check in the amount of \$320.00 covering the fee for this filing.

If any additional extension and/or fee is required, please charge Deposit Order Account No. 19-0079. A duplicate of this paper is attached.

Respectfully submitted,

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CERTIFICATE OF MAILING (37 CFR 1.8(a))

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on August 7, 2003 in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number EL279909626US addressed to the: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450.

  
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Sir:

**APPEAL BRIEF**

Pursuant to 35 U.S.C. §134 and 37 C.F.R. §§1.191, 1.192 and 1.196, Appellants' respectfully appeals to the Board of Patent Appeals and Interferences from the Examiner's final rejection of applicant's Patent Application Ser. No. 09/457,796 filed December 12, 1999.

**1. REAL PARTY IN INTEREST**

The real party in interest in the present case is the Assignee, Matrix Technologies Corporation.

**2. RELATED APPEALS AND INTERFERENCES**

The present application has no pending related appeals or interferences.

**3. STATUS OF CLAIMS**

Claims 26-28, 2-5 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Laska (U.S.P. 5,993,745) in view of Corsi et al. (U.S.P. 4,942,271).

Claim 10 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Laska (U.S.P. 5,993,745) and Corsi et al. (U.S.P. 4,942,271) as applied to claim 26, and further in view of Berry Jr. (U.S.P. 5,415,846).

#### **4. STATUS OF AMENDMENTS**

No amendments after the final rejection have been filed.

#### **5. SUMMARY OF THE INVENTION**

The present invention is directed to a test tube rack having a base 22 and a cover 31. The base has a top surface subdivided into an array of tube-receiving openings 26-30, and sidewalls 32, 32 with coaxially aligned outwardly protruding trunnions 36, 38.

The cover 31 has oppositely facing side walls 46, 48 with notches 52, 54 defined by trunnion travel surfaces 56 extending between ledge surfaces 58 and tabs 60 spaced one from the other at the notch entrances.

When the cover is closed as shown in Figure 2, the trunnions 36, 38 are received in the notches 52, 54 and are in contact with the trunnion travel surfaces 56. The spacing between the ledge surfaces 58 and the tabs 60 relative to the external dimensions of the trunnions is such as to permit unimpeded vertical movement of the cover between its closed position (Figure 2) and a raised position removed from the base (Figure 3). The trunnion travel surfaces 56 are slidable over the trunnions 36, 38 during rotation of the cover between its closed position (Figure 2) and an inclined open position (Figure 6) at which the ledge surfaces 58 abut the trunnions to limit further cover rotation, and the tabs 60 underlie the trunnions to impeded vertical removal of the thus opened cover from the base.

#### **6. ISSUES**

The issue before the Board in this appeal is whether the Examiner was correct in rejecting independent claim 26 under 35 U.S.C. 103(a) as being unpatentable over Laska in view of Corsi et al., the remaining dependent claims being rejected on the same or primarily the same premise as the rejection of claim 26.

## 7. GROUPING OF CLAIMS

For the purpose of this appeal, claims 2-5, 10, and 26-28 stand or fall together.

## 8. ARGUMENT

Applicants do not quarrel with the Examiner's assessment of Laska. Laska does indeed disclose a test tube storage assembly comprising a base and transparent cover. Laska does not, however, disclose applicant's claimed connection between the cover and base, which provides for, inter alia, unimpeded vertical removal of the cover from the base.

The Examiner seeks to remedy this deficiency by combining Laska with Corsi et al., and it is this combination that the applicants dispute.

In the amendment that preceded the Examiner's final rejection, applicants argued:

More particularly, in Corsi et al., each of the embodiments includes a cover snap-fitted to the base. The embodiment of Figures 3-5 has a cover 12 snap-fitted to the base 14 (Col. 4, lines 1-10). The same is true of the embodiment of Figures 6-9 (Col. 5, lines 16-17) and the embodiment of Figures 10-13 (Col. 6, lines 8-9). With each of the embodiments in Corsi et al., the cover must be forcibly separated from the base, and thus the hinges impede that separation.

In her final rejection, the Examiner responded to this argument by first contending that:

Corsi et al. does not teach unimpeded vertical movement of the cover about the trunnions between a closed position and an inclined open position.

(Paragraph 8, lines 4-5)

But that totally misses the mark. Claim 26 requires unimpeded vertical movement of the cover between its closed position and a raised position removed from the base.

In the same paragraph, the Examiner went on to comment:

However upon closer inspection of the reference, Corsi et al. do not teach that the trunnions 220 are snapped into notch 260, but that the latching mechanism comprising legs 218, 244 are snap-fitted together. Moreover, the embodiment of Corsi et al. in Figures 10-11 clearly show the notch 260 larger than the

maximum transverse dimension of the trunnion 220, thereby providing unimpeded vertical removal of the cover.

(Paragraph 8, lines 7-11)

However, a reading of Corsi et al.'s entire specification shows without any doubt that this is manifestly incorrect.

Corsi et al. discloses three embodiments: Fig. 1-5; Figs. 6-9; and Figs. 10-13.

In the description of the first embodiment illustrated in Figures 1-5, Corsi et al. points out:

The elongated opening 74 has a height between the inner ends of surface 64 and surface 72 which is less than the maximum transverse thickness of the elongated rib 28 between the outer ends of surfaces 36 and 38.

(Col. 3, Lines 60-64)

As is evident from Figs. 3-5, the cover 12 can be transversely snap-fitted to the base 14 by application of a force in a direction substantially perpendicular to the longitudinal axes of the base and the cover and the rib 28 and groove 60. This snap, or friction, fit results from forcing the resilient arm 58 over the rib 28 and allowing the arm to be biased outwardly under the influence of the widest thickness of rib 28 between stop surfaces 36 and 38 and then snapped inwardly due to its own resilience once surfaces 62 and 64 are past surfaces 36 and 38.

(Col. 4, Lines 1-11)

Thus, there is absolutely no doubt that Corsi et al.'s first embodiment requires a snap-fit connection between the two pivotally connected components. Snap-fits impede ready separation.

In the description of the third embodiment shown in Figures 10-13, Corsi et al. begins with the observation that:

This embodiment is substantially identical to the first embodiment, as seen in Figs. 1-5, except for the means for coupling the first leg 218 and the third leg 244 together. Thus, only the means for coupling the first leg 218 and the third leg 244 will be discussed in detail below.

(Col. 5, Lines 46-50)

The legs 218 and 244 are on the side of the assembly opposite to that of the rib 228 and groove 260, where pivotal interconnection occurs.

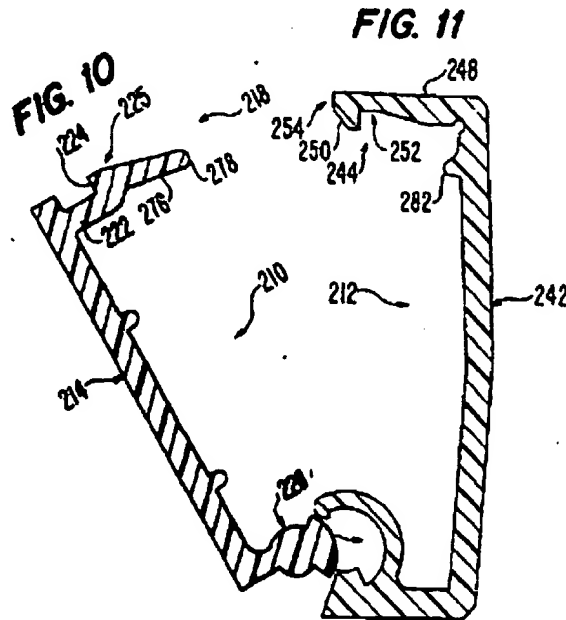
Corsi et al. then describes the pivotal interconnection between the components 210, 212 of the third embodiment as follows:

As seen in Figs. 12 and 13, the cover 212 is snap-fitted to the base 210 by application of a force in a direction substantially perpendicular to the longitudinal axes of the base and cover and the rib and groove, thereby pivotally but releasably coupling the elongated rib 228 in the elongated groove 260.

(Col. 6, Lines 8-13)

A full reading of the Corsi et al. specification thus plainly establishes that in the third embodiment, there is a snap-fit pivotal interconnection between the rib 228 and groove 260.

Contrary to the Examiner's assertion, the Corsi et al. drawings are entirely consistent with this interpretation. As shown below, the maximum transverse dimension of the rib 228 plainly exceeds the entrance width groove 260.

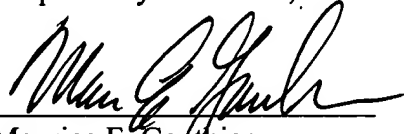


**SUMMARY**

Thus, to summarize, combining Laska with Corsi et al. would result in Laska's cover being pivotally connected to the base with a snap fit, and this would impede vertical removal of the closed cover from the base. Applicants' claim 26 calls for unimpeded vertical movement of the cover, and as such, in combination with its other claimed features, patentably distinguishes over the Examiner's combination of Laska and Corsi et al.

Applicants respectfully request that the Board of Patent Appeals and Interferences reverse the Examiner's final rejection of claims 2-5, 10, and 26-28.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Maurice E. Gauthier", written over a horizontal line.

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9. APPENDIX

APPEALED CLAIMS

1 26. A tube rack comprising:

2 a base having a top surface and oppositely facing side walls, said top surface being  
3 subdivided into an array of tube-receiving openings, each of said side walls having a trunnion  
4 protruding outwardly therefrom, with said trunnions being aligned coaxially; and

5 a cover having oppositely facing side walls with notches in said side walls, said  
6 notches being defined by trunnion travel surfaces extending between ledge surfaces and tabs  
7 spaced one from the other at the entrance to said notches, said cover being configured and  
8 dimensioned to be seated on said base in a closed position enclosing said top surface, with said  
9 trunnions received in said notches and in contact with said trunnion travel surfaces, the spacing  
10 between said ledge surfaces and said tabs relative to the external dimensions of said trunnions  
11 being such as to permit unimpeded vertical movement of said cover between said closed position  
12 and a raised position removed from said base, said trunnion travel surfaces being slidable over said  
13 trunnions during rotation of said cover about said trunnions between said closed position and an  
14 inclined open position at which said ledge surfaces abut said trunnions to prevent rotation of said  
15 cover beyond said open position and said tabs underlie and are engageable with said trunnions to  
16 impede vertical removal of said cover from said base, said cover when in said open position  
17 providing access to said tube-receiving openings.

1 27. The tube rack of claim 26 wherein said downwardly facing openings are larger than the  
2 maximum transverse dimensions of said trunnions.



1 28. The tube rack of claim 26 wherein said tube receiving openings communicate with  
2 vertically disposed wells having open bottoms, and wherein said wells are provided internally with  
3 mutually spaced support pads positioned to vertically support tubes received in said wells via said  
4 openings.

1 2. The tube rack of claim 26, wherein said openings include internal mutually spaced pads,  
2 said pads being positioned to support tubes received in said openings, while providing flow paths  
3 adjacent to the tubes through which air may pass.

1 3. The tube rack of claim 26, wherein said pads have chamfered concave surfaces.

1 4. The tube rack of claim 3, wherein said openings are substantially rectangular and each wall  
2 of said opening includes one of said support pads.

1 5. The tube rack of claim 3, wherein said openings are substantially rectangular and at least  
2 two of said facing walls includes one of said support pads.

1 10. The tube rack of claim 26, further comprising:  
2 first and second slide latches each having a lengthwise tongue; and  
3 wherein the sidewalls of said base each include a slide surface comprising a lengthwise groove  
4 that slidably mates with one of said lengthwise tongues of an associated one of said slide  
5 latches, such that each of said slide latches moves lengthwise over its associated said slide  
6 surface between latched and unlatched positions.